

**IN THE CLAIMS:**

Please amend the claims as follows.

Claim 1 (Currently Amended): A photodetector comprising:

$(K \times M \times N)$  photodiodes  $PD_{k,m,n}$  ( $K$  being an integer of no less than 2;  $k$  being integers of no less than 1 and no more than  $K$ ;  $M$  being an integer of no less than 1;  $m$  being integers of no less than 1 and no more than  $M$ ;  $N$  being an integer of no less than 2; and  $n$  being integers of no less than 1 and no more than  $N$ ), each generating an electric charge by an amount corresponding to an intensity of light incident thereon;

$(M \times N)$  integrating circuits, one of each being provided in correspondence to  $K$  photodiodes  $PD_{k,m,n}$  ( $k = 1$  to  $K$ ) among the  $(K \times M \times N)$  photodiodes  $PD_{k,m,n}$  and each successively inputting and accumulating the electric charges generated at the  $K$  photodiodes  $PD_{k,m,n}$  ( $k = 1$  to  $K$ ) and outputting a voltage that is in accordance with the amount of the accumulated electric charges; and

A/D converting circuits, each A/D converting circuit being provided in correspondence to one of said  $(M \times N)$  integrating circuits, and outputting a digital value according to the voltage outputted from the corresponding integrating circuit,

wherein the  $(K \times M \times N)$  photodiodes  $PD_{k,m,n}$  are arranged in  $M$  rows and  $(K \times N)$  columns either two-dimensionally (when  $M = 2$ ) or one-dimensionally (when  $M = 1$ ), with each photodiode  $PD_{k,m,n}$  being positioned at the position of the  $m$ -th row and  $(n + (k - 1)N)$ -th column,

switches  $SW_{k,m,n}$  are provided in a one-to-one correspondence with respect to photodiodes  $PD_{k,m,n}$  and are arranged between the photodiodes  $PD_{k,m,n}$  and signal lines  $SL_{-m,n}$ ,

each set of K photodiodes  $PD_{k,m,n}$  ( $k=1$  to  $K$ ) is connected via the corresponding switches  $SW_{k,m,n}$  to a signal line  $SL_{m,n}$ ,

each signal line  $SL_{m,n}$  is connected to an input end of an integrating circuit, and switches  $SW_{k,m,n}$  on the same row are connected to the same control line  $CL_{k,n}$ , and the opening/closing of each row of switches  $SW_{k,m,n}$  is controlled together by a control signal that is transmitted via the control line  $CL_{k,n}$ .

Claim 2 (Original): The photodetector according to Claim 1, further comprising CDS circuits, each being arranged between said integrating circuit and said A/D converting circuit, inputting the voltage output from the integrating circuit, and outputting a voltage expressing the fluctuation of the input voltage over a fixed time.

Claim 3 (Canceled).